

REMARKS

In the non-final Office Action, the Examiner rejected claims 46-69 as unpatentable on the ground of nonstatutory obviousness-type double patenting over claims 1, 3, 5, and 8 of Bromley et al. (U.S. Patent No. 6,658,021, which is the parent case of the present application) in view of Alles et al. (U.S. Patent No. 6,466,976) (Office Action, page 2). Applicants respectfully traverse this rejection.

Independent claim 46 is directed to a device that includes a demultiplexer configured to receive a channelized synchronous optical network (SONET) data stream and separate the channelized SONET data stream into constituent tributary data streams, the tributary data streams including a packet over SONET (POS) tributary data stream, and an asynchronous transfer mode (ATM) tributary data stream. The device also includes a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream.

Claim 46 is patentably distinct from the invention recited in claims 1, 3, 5, and 8 of Bromley et al. For example, claims 1, 3, 5, and 8 of Bromley et al. do not recite a demultiplexer configured to receive a channelized SONET data stream and separate the channelized SONET data stream into constituent tributary data streams, and a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream, as required by claim 46 of the present application. Instead, claim 1 of Bromley et al. recites an input port for receiving the data, the data being formatted as SONET frames that contain data encapsulated in one of multiple formats within the SONET frames, and decapsulation logic configured to delineate the multiple formats to identify particular ones of the multiple formats

and configured to decapsulate the delineated data in the multiple formats into a packet format used in the forwarding node, the decapsulation logic performing the delineation and decapsulation without executing processor instructions (col. 16, lines 19-30). Claim 3 of Bromley et al. recites that the decapsulation logic includes a delineator for delineating Asynchronous Transfer Mode (ATM) cells in the data (col. 16, lines 35-37). Claim 5 of Bromley et al. recites that the decapsulation logic extracts Internet Protocol (IP) packets from the data. Claim 8 of Bromley et al. recites that the decapsulation logic includes a Point to Point Protocol (PPP) deframer for deframing PPP frames.

The Examiner admitted that claims 1, 3, 5, and 8 of Bromley et al. do not recite a line card. However, the Examiner alleged that the other features recited in claim 46 of the present application are disclosed by the “input port” and “decapsulation logic” recited in claims 1, 3, 5, and 8 of Bromley et al. (Office Action, page 2). Without acquiescing in the Examiner's allegations, Applicants submit that claims 1, 3, 5, and 8 of Bromley et al. do not recite a demultiplexer configured to receive a channelized synchronous optical network (SONET) data stream and separate the channelized SONET data stream into constituent tributary data streams, and a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream, as required by claim 46 of the present application.

Bromley et al. discloses a receive ASIC 70 on line card 59 that decapsulates data and determines how to direct data in an input data stream, and a transmit ASIC 64 on line card 53 that encapsulates the data in a format that is appropriate for a destination (col. 6, line 67 – col. 7, line 6). Bromley et al. further discloses a SONET multiplexer 50 that multiplexes four OC-12 data streams into an OC-48 data stream, and demultiplexers 50 and 52 positioned at feeds of

output ports that take OC-48 from the line card and split it into constituent tributaries, such as OC-12, OC-3 or OS-3 tributaries (col. 6, lines 53-62). As shown by these disclosures, decapsulation is provided by ASIC 70 and not by demultiplexers 50 and 52. Fig. 7 of Bromley et al. further provides proof of the distinction between demultiplexing and decapsulation. For example, Fig. 7 shows that an OC-48 input data stream 90 is first demultiplexed 92 into separate tributaries or channels, and subsequently, packets are decapsulated 94 (col. 7, lines 26-35).

In light of the above, Applicants respectfully submit that the “decapsulation logic” recited in claims 1, 3, 5, and 8 of Bromley et al. fails to disclose a demultiplexer configured to receive a channelized SONET data stream and separate the channelized SONET data stream into constituent tributary data streams, and a line card coupled to the demultiplexer and configured to provide the demultiplexer with the channelized SONET data stream, as required by claim 46 of the present application.

The Examiner alleged that Alles et al. discloses a port on a line card, and cited col. 10, lines 12-16 of the reference for support (Office Action, page 2). Without acquiescing in the Examiner’s allegations, Applicants respectfully submit that the disclosure of Alles et al. does not cure the deficiencies in claims 1, 3, 5, and 8 of Bromley et al. identified above with regard to claim 46.

For at least these reasons, Applicants submit that claim 46 is patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination. Claims 47-52 depend from claim 46 and are, therefore, patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 46.

Independent claim 53 is directed to one or more devices in a data processing environment that include a multiplexer configured to receive tributary data streams including a packet over synchronous optical network (POS) tributary data stream, and an ATM tributary data stream, where the multiplexer is further configured to combine the tributary data streams into a single channelized SONET data stream. The one or more devices also include a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream.

Claim 53 is patentably distinct from the invention recited in claims 1, 3, 5, and 8 of Bromley et al. For example, claims 1, 3, 5, and 8 of Bromley et al. do not recite a multiplexer configured to receive tributary data streams including a POS optical network tributary data stream, and an ATM tributary data stream, and to combine the tributary data streams into a single channelized SONET data stream, and a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream, as required by claim 53 of the present application.

The Examiner admitted that claims 1, 3, 5, and 8 of Bromley et al. do not recite a line card. However, the Examiner alleged that the other features recited in claim 53 of the present application are disclosed by the “input port” and “decapsulation logic” recited in claims 1, 3, 5, and 8 of Bromley et al. (Office Action, page 2). Without acquiescing in the Examiner's allegations, Applicants submit that claims 1, 3, 5, and 8 of Bromley et al. do not recite a multiplexer configured to receive tributary data streams including a POS optical network tributary data stream, and an ATM tributary data stream, and to combine the tributary data streams into a single channelized SONET data stream, and a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream, as required by claim 53 of

the present application.

Bromley et al. discloses a receive ASIC 70 on line card 59 that decapsulates data and determines how to direct data in an input data stream, and a transmit ASIC 64 on line card 53 that encapsulates the data in a format that is appropriate for a destination (col. 6, line 67 – col. 7, line 6). Bromley et al. further discloses SONET multiplexers 50 and 52 positioned at the input of input ports for the line cards to multiplex the incoming tributary data streams into an OC-48 data stream (col. 6, lines 53-58). As shown by these disclosures, decapsulation is provided by ASIC 70 and not by multiplexers 50 and 52. Fig. 7 of Bromley et al. further provides proof of the distinction between multiplexing and decapsulation. For example, Fig. 7 shows that packets are decapsulated 94, and tributaries are multiplexed 106 to produce an output data stream 108 (col. 7, lines 26-50).

In light of the above, Applicants respectfully submit that the “decapsulation logic” recited in claims 1, 3, 5, and 8 of Bromley et al. fails to disclose a multiplexer configured to receive tributary data streams including a POS optical network tributary data stream, and an ATM tributary data stream, and to combine the tributary data streams into a single channelized SONET data stream, and a line card coupled to the multiplexer and configured to receive the single channelized SONET data stream, as required by claim 53 of the present application.

The Examiner alleged that Alles et al. discloses a port on a line card, and cited col. 10, lines 12-16 of the reference for support (Office Action, page 2). Without acquiescing in the Examiner’s allegations, Applicants respectfully submit that the disclosure of Alles et al. does not cure the deficiencies in claims 1, 3, 5, and 8 of Bromley et al. identified above with regard to claim 53.

For at least these reasons, Applicants submit that claim 53 is patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination. Claims 54-58 depend from claim 53 and are, therefore, patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 53.

Independent claim 59 recites features similar to (yet possibly of different scope than) features described above with respect to claim 46. Therefore, claim 59 is patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 46. Claims 60-64 depend from claim 59 and are, therefore, patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 59.

Independent claim 65¹ recites features similar to (yet possibly of different scope than) features described above with respect to claim 53. Therefore, claim 65 is patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 53. Claims 67-69 depend from claim 65 and are, therefore, patentably distinct from Bromley et al. and Alles et al., whether taken alone or in any reasonable combination, for at least the reasons given with regard to claim 65.

For at least the foregoing reasons, Applicants respectfully request the reconsideration and withdrawal of the nonstatutory obviousness-type double patenting rejection of claims 46-69 as allegedly unpatentable over claims 1, 3, 5, and 8 of Bromley et al. in view of Alles et al.

¹ It appears that the Examiner made a typographical error in the sentence "Referring to claims 59 & 60...." (Office

CONCLUSION

In view of the foregoing remarks, Applicants respectfully request the Examiner's reconsideration of the application and the timely allowance of pending claims 46-69.

As Applicants' remarks with respect to the Examiner's rejections overcome the rejections, Applicants' silence as to certain assertions by the Examiner in the Office Action or certain requirements that may be applicable to such rejections (e.g., whether a reference constitutes prior art, motivation to combine references, assertions as to dependent claims, etc.) is not a concession by Applicants that such assertions are accurate or such requirements have been met, and Applicants reserve the right to dispute these assertions/requirements in the future.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account No. 50-1070 and please credit any excess fees to such deposit account.

Respectfully submitted,

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